

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number  
WO 2005/079897 A1

(51) International Patent Classification<sup>7</sup>: A61M 16/00

(74) Agents: DAVIDSON, Geoffrey, Robert et al.; Halford & Co., 1 Market Street, Sydney, New South Wales 2000 (AU).

(21) International Application Number:

PCT/AU2005/000248

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 24 February 2005 (24.02.2005)

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/547,812 25 February 2004 (25.02.2004) US

(71) Applicant (for all designated States except US): RESMED LIMITED [AU/AU]; 97 Waterloo Road, North Ryde, New South Wales 2113 (AU).

(72) Inventors; and

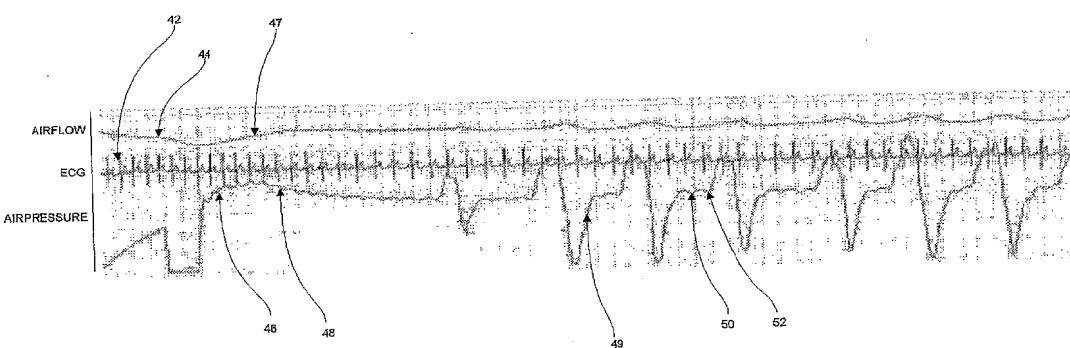
(75) Inventors/Applicants (for US only): PHUAH, Chee, Keong [MY/AU]; c/-ResMed Limited, 97 Waterloo Road, North Ryde, New South Wales 2113 (AU). FARRUGIA, Steven, Paul [AU/AU]; c/- ResMed Limited, 97 Waterloo Road, North Ryde, New South Wales 2113 (AU). MARTIN, Dion, Charles, Chewe [AU/AU]; c/- ResMed Limited, 97 Waterloo Road, North Ryde, New South Wales 2113 (AU). CHAN, Christine, Wei, Chih [AU/AU]; 43 Newton Road, Strathfield, New South Wales 2135 (AU).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CARDIAC MONITORING AND THERAPY USING A DEVICE FOR PROVIDING PRESSURE TREATMENT OF SLEEP DISORDERED BREATHING



(57) Abstract: A method of using CPAP equipment to sense cardiogenic oscillations in a patient's airflow, and to monitor and treat the patient's cardiac condition. The apparatus diagnoses cardiac morbidity conditions, such as the existence of arrhythmias or other cardiac abnormalities, and influences and optimizes cardiac stroke volume. The apparatus further monitors pulse-transit time, changes in the heart pre-ejection period, and the duration of the cardiac cycle.

WO 2005/079897 A1